RSM-25

Grade: Standard

Radium selective, strong acid cation resin, styrene/DVB macroporous, sodium form

ResinTech RSM-25 is a sodium form macroporous strong acid cation resin. Its high crosslinking results in very high selectivity for radium on a one-time use basis. It does not contain barium, operates across the pH range, and does not require a minimum sulfate concentration in the raw water. RSM-25 is intended for radium removal from otherwise potable waters that contain modest concentrations of hardness ions such as calcium.

FEATURES & BENEFITS

- Superior Radium Removal Capacity
- Unique Polymer Structure
- Superior Physical Stability
- Complies With US FDA Regulations

APPLICATIONS

- Radium Removal

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Macroporous
Ionic Form (as shipped)	Sodium (Na^+)
Functional Group	Sulfonic Acid
Physical Form	Spherical Beads
Uniformity Coefficient	1.60
Particle Size	16-50 US mesh (297-1190µm)
< 50 mesh (300 µm) %	< 1%
Minimum Sphericity (%)	90
Reversible Swelling	3 to 5% (Na → Ca)
Capacity (meq/mL)	1.80
Moisture Retention (%)	45 to 55
Shipping Weight	49 - 51 lbs/cu.ft. (785 - 817 g/L)
Color	Tan
Regenerable	Regenerable

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	250°F (121°C)	Operating pH Range	0 to 14
Minimum Bed Depth	24 in. (61.0 cm)	Flow Rate	
Maximum Pressure Loss	25 psi (172 kPa)	Working Service	1-10 gpm/cu.ft. (8-80 BV/h)

RESINTECH INC.
INNOVATIONS IN ION EXCHANGE

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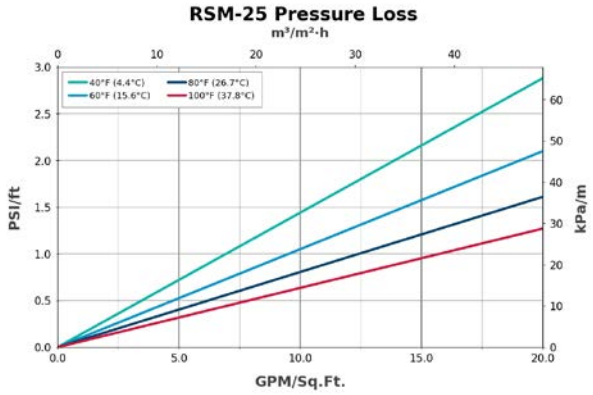
REGENERATION DETAILS

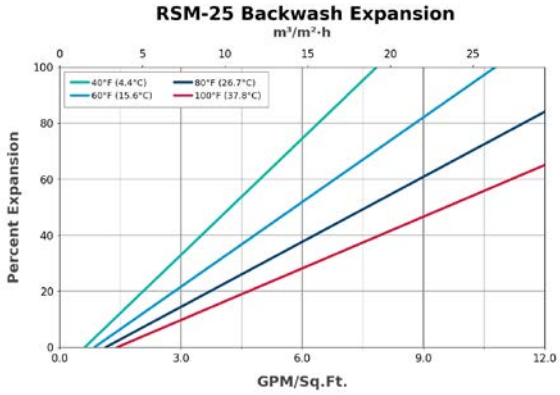
Salt Cycle (NaCl)	10 to 15%

PRESSURE LOSS



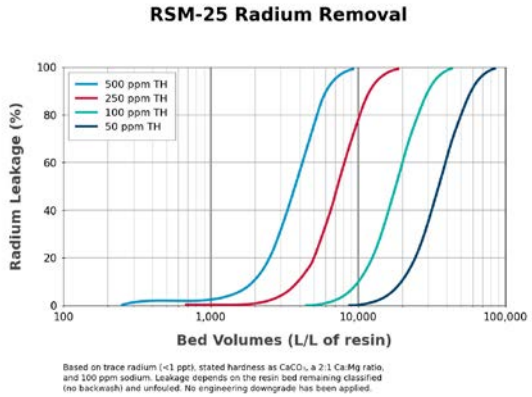
The graph above shows the expected pressure loss of ResinTech RSM-25 per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech RSM-25 as a function of flow rate at various temperatures.

CAPACITY



Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO3, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

RADIUM REMOVAL MULTIPLE CYCLE USE

ResinTech **RSM-25** may be regenerated and reused over many hundreds of exhaustion and regeneration cycles. It is ordinarily regenerated with sodium chloride but other regenerants such as potassium chloride can be used. Because it is difficult to remove all the radium during regeneration, the throughput in regenerable applications is limited to softening capacity.

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CERTIFICATIONS

Meets NSF/ANSI/CAN 61

Meets NSF/ANSI/CAN 372

PACKAGING

Standard

1 cu.ft. Bag | 7 cu.ft. Drum
25L Bag | 200 L Drum

Metric

5 cu.ft. Drum | 42 cu.ft. Supersack
140L Drum | 1000 L Supersack

Shipping Weight

49 - 51 lbs/cu.ft. (785 - 817 g/L)

MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheets (MSDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com

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